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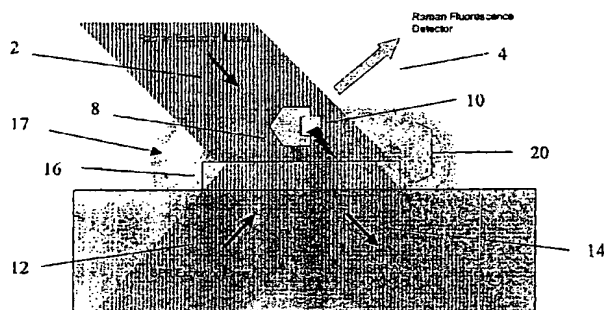
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(54) Title: **MOLECULAR DETECTOR ARRANGEMENT**



(57) **Abstract**: A detector assembly for detecting the presence of analyte molecules, in particular, proteins, uses both Surface Enhanced Raman Scattering (SERS) and Surface Plasmon Resonance (SPR) in synergy. The excitation laser used for SERS provides scattering from a reporter dye to which an analyte molecule is attached in the vicinity of a conducting surface. Simultaneously, a second laser is provided at the critical angle to the conducting surface. The second laser causes a field to be created in the region of the analyte which enhances the Raman scattering effect.

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